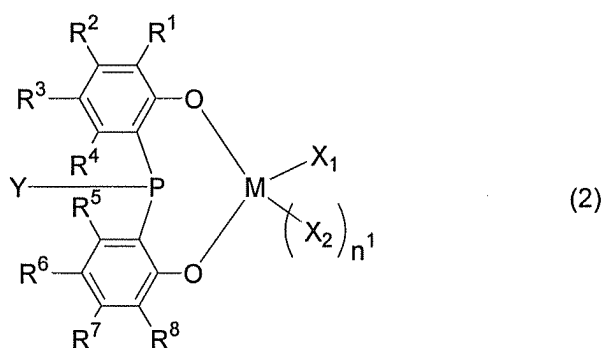


**AMENDMENTS TO THE CLAIMS**

1. - 2. (Canceled)

3. (Currently Amended) The A transition metal complex ~~according to claim 1,~~  
~~wherein the compound of formula (1) is a compound of formula (2):~~



wherein M represents Cr ~~an element of Group 6 of Periodic Table of Elements,~~

Y represents a substituted or unsubstituted C1-10 alkyl group,

a substituted or unsubstituted C7-20 aralkyl group,

a substituted or unsubstituted C6-20 aryl group,

a silyl group substituted with substituted or unsubstituted C1-20 hydrocarbon,

R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are the same or different and represent a hydrogen atom,

a halogen atom, an C1-10 alkyl group, an C1-10 alkoxyl group, or

a silyl group substituted with C1-20 hydrocarbon,

X<sup>1</sup> and X<sup>2</sup> are the same or different, and represent a hydrogen atom, a halogen atom,

a substituted or unsubstituted C1-10 alkyl group,

a substituted or unsubstituted C7-20 aralkyl group,

a substituted or unsubstituted C6-20 aryl group,

a substituted or unsubstituted C1-10 alkoxy group,  
a substituted or unsubstituted C7-20 aralkyloxy group,  
a substituted or unsubstituted C6-20 aryloxy group, or  
an amino group disubstituted C1-20 hydrocarbon, and  
 $n^1$  is an integer of 0 to 3.

4. (Currently Amended) The transition metal complex according to claim 3 ~~any one of claims 1 to 3~~, wherein Y is a substituted or unsubstituted C1-10 alkyl group, or a substituted or unsubstituted C6-20 aryl group.

5. (Canceled)

6. (Currently Amended) An olefin polymerization catalyst obtained by combining the transition metal complex as defined in claim 3 or 4 ~~claim 4~~ with the following compound (A),

Compound (A): any one of the following compounds (A<sub>1</sub>) to (A<sub>3</sub>), or a mixture of two or more of them

(A<sub>1</sub>): an organic aluminum compound of formula  $(E_1)_aAl(Z')_{(3-a)}$ ,

(A<sub>2</sub>): cyclic aluminoxane having a structure of formula  $\{-Al(E_2)-O-\}_b$ ,

(A<sub>3</sub>): linear aluminoxane having a structure of formula  $(E_3)\{-Al(E_3)-O-\}_cAl(E_3)_2$

wherein E<sub>1</sub> to E<sub>3</sub> are the same or different, and represent a C1-8 hydrocarbon group, Z's are the same or different, and represent a hydrogen atom or a halogen atom, a represents 1, 2 or 3, b is an integer of 2 or more, and c represents an integer of 1 or more.

7. (Original) The olefin polymerization catalyst according to claim 6, which is obtained by further combining the following compound (B),

Compound (B): any one of the following compounds (B<sub>1</sub>) to (B<sub>3</sub>), or a mixture of two or more of them

(B<sub>1</sub>): a boron compound of formula BQ<sub>1</sub>Q<sub>2</sub>Q<sub>3</sub>,

(B<sub>2</sub>): a boron compound of formula Z<sup>+</sup>(BQ<sub>1</sub>Q<sub>2</sub>Q<sub>3</sub>Q<sub>4</sub>)<sup>-</sup>,

(B<sub>3</sub>): a boron compound of formula (L-H)<sup>+</sup>(BQ<sub>1</sub>Q<sub>2</sub>Q<sub>3</sub>Q<sub>4</sub>)<sup>-</sup>,

wherein B is a trivalent boron atom, Q<sub>1</sub> to Q<sub>4</sub> are the same or different and represent a halogen atom, a C1-20 hydrocarbon group, a halogenated C1-20 hydrocarbon group, a silyl group substituted with C1-20 hydrocarbon, an C1-20 alkoxy group, or an amino group disubstituted with C1-20 hydrocarbon, Z<sup>+</sup> represents an inorganic or organic cation, and L represents a neutral Lewis base.

8.-9. (Canceled)

10. (Currently Amended) A process for preparing an olefin polymer, which comprises polymerizing olefin ~~utilizing~~ by contacting an olefin with an olefin polymerization catalyst as defined in claim 6.

11. (Canceled)

12. (New) A process for preparing an olefin polymer, which comprises polymerizing olefin by contacting an olefin with the olefin polymerizing catalyst as defined in claim 7.